

MDCAT Chemistry Chapter 6 Chemical Equilibrium Online Test

Sr	Questions	Answers Choice
1	The number of reacting molecules whose concentration change during reaction is called	A. Activated molecule B. Rate of reaction C. Order of reaction D. half-life
2	In dilatometric method is directly proportional to extent of reaction	A. Change in concentration B. Change in pressure C. Change in volume D. Change in temperature
3	The radioactive disintegration of $^{238}\text{U}_{92}$ is	A. First order B. Second order C. Third order D. Zero order
4	By increasing the concentration of reactants, the rate of reaction	A. Decreases B. Increases C. Remains constant D. Not predicted
5	When does average rate become equal to instantaneous rate of reaction	A. At the start of reaction B. time interval is zero C. at the end of reactor D. time interval approaches zero
6	The conversion of molecules of A to B follows a second order kinetics. Doubling the concentration of A will increase the rate of formation of B by a factor of	A. 2 B. 4 C. 1/2 D. 1/4
7	For a chemical reaction in which one of the reactant also act as solvent, the order will be	A. First order B. Third order C. Second order D. pseudo-first order
8	The rate of reaction between A and B increases by a factor of 100, when the concentration of A is increased 10 folds, the order of reaction with respect to A is	A. 10 B. 1 C. 4 D. 2
9	Which of the following statement about the order of reaction is true?	A. The order of reaction can only be determined by experiment B. a second order reaction is also bimolecular C. The order of reaction is always non-zero D. The order of reaction increases with increasing temperature
10	All the Hydrolytic reactions are	A. First order B. Second order C. Third order D. pseudo-first order
11	The increase in reaction rate as a result of increase in temperature from 10K to 90K is	A. 512 B. 256 C. 400 D. 112
12	The slope of the graph is steepest at the beginning of reaction showing	A. Rapid decrease in concentration of reactants B. Rapid increase in concentration of reactants C. Fast rate of reaction D. All of the above
13	When the concentration of reactants is taken as unity the rate of reaction is equal to	A. average rate B. concentration of reactant C. instantaneous rate D. specific rate constant
14	If the energy of the activated complex lies close to energy of reactants, it means that reaction is	A. Slow B. Exothermic C. Endothermic D. Fast

15	When the concentration of product is increased the instantaneous rate of reaction with reference to reactants will be	A. Positive B. Negative C. the same D. falling curve
16	Unit of the rate constant depends upon the	A. Molecularity of reaction B. Order of reaction C. Concentration terms D. Number of reactants
17	Consider gas is measure in bars then the units of rate of reaction is	A. Mole dm ⁻³ sec B. Bars sec C. Mole dm ⁻³ sec ⁻¹ D. Bars sec ⁻¹
18	If the rate of the reaction is equal to the rate constant, the order of the reaction is	A. 3 B. 1 C. 0 D. 2
19	Doubling the pressure in a liquid phase reaction	A. Will double the rex B. Will increase the rex C. Will decrease the rex D. Will not alter the concentration of reactant
20	The order of reaction provides valuable information about of reaction	A. Condition B. Concentration C. Mechanism D. Parameters
21	Substance which is formed as well as consumed during a chemical reaction and have temporary existence.	A. Reactant B. product C. Catalyst D. Intermediate
22	Which of the following reactions are usually slow?	A. Neutralization of acids and bases B. Displacement Reactions C. Organic substitution reaction D. Free radical reactions
23	The concentration of product is increasing from 30 mole/dm ³ to 40mol/dm ³ in 0.5 sec then rate of reaction will be-----moledm ⁻³ sec ⁻¹	A. 0 B. 20 C. 15 D. 25
24	Rate of which reaction increases with temperature?	A. Exothermic and endothermic reactions B. Endothermic reactions C. Exothermic reactions D. None of these
25	The number of atoms or molecules whose concentrations determines the rate of a chemical reaction is called the	A. Molecularity of the reaction B. specific activity of the reaction C. Order of the reaction D. rate constant of the reaction
26	The study of which one of the followings guides to the mechanism of the reaction	A. Order of reaction B. Rate of reaction C. Half-life period of reaction D. Rate determining step
27	The rate of reaction for a reaction is 30 mol dm ⁻³ sec ⁻¹ if the product of concentration of 10.reactant is unity the specific rate constant is	A. 25 B. 2.5 C. 30 D. 15
28	Higher the surface area available for reaction	A. slower the reaction B. faster the reaction C. constant the reaction D. lower the Ea
29	Which property of liquid is measured by polarimeter	A. Conductance B. Optical activity C. Refractive Índex D. Change in volume
30	For reaction of methane and chlorine light is not available then	A. Reaction will take place rapidly B. No Reaction take place C. Reaction occurs at double the rate D. May all cases occur
31	The reaction kinetics concerned with the	A. Rate of reaction B. Direction of reaction C. Factor effecting rate of reaction D. both a & b

32	Rusting of iron is the example of	A. Fast B. Slow C. moderate D. depends upon conditions
33	If the reaction " $P+Q \rightarrow R+S$ " is described as being of zero order with respect to P, it means that	A. P is catalyst in this reaction B. P molecules do not possess sufficient energy to react C. The concentration of P does not change during the reaction D. The rate of reaction is independent of the concentration of P
34	The reaction which is zero order	A. Decomposition of N_2O_5 B. Formation of Glucose in plant C. Formation of FeI_2 D. Chlorination of methane in sunlight
35	In the reaction $A+B \rightarrow$ Products, if B is taken in excess, then it is an example of	A. Second order reaction B. zero order reaction C. Pseudo first order reaction D. first order reaction
36	The reaction takes place among the molecules when they have:	A. Activation energy B. Properly oriented C. Concentrated D. Activation energy and proper orientation
37	The collision which results in chemical reaction	A. Effective collision B. Ineffective collision C. Useless collision D. All of the above
38	For a chemical reaction to occur	A. The vessel shall be open B. Reacting molecules should have less energy than E_a at time of collision C. Reacting molecules must be properly oriented and energy more than or equal to E_a D. The reacting molecules must not collide with each other
39	Spectrometry method is applicable if a reactant or a product absorbs radiation	A. Ultraviolet B. Visible C. Infrared D. Any of these
40	Amount of product formed increases with time, this statement is true for reactions-----with kinetics	A. 1st order B. 3rd order C. zero order D. Any order
41	For a chemical reaction which can never be a fractional no	A. order B. molecularity C. half-life D. rate constant
42	In which of the following techniques rate of reaction is directly related with number of ions	A. Spectrometry B. Dilatometric method C. Conductometric method D. Refractometric method
43	Reaction kinetics is important to discover the---under which reaction will proceed most economically:	A. rate constant B. Conditions C. volume D. equilibrium point
44	If reactants are conductor of electricity, then method is used to measure the change in concentration of reaction	A. Optical rotation B. Refractometric C. Dilatometric D. Electrical conductivity
45	A reaction $A \rightarrow B$ is independent of concentration of reactant A. The order of reaction will be	A. First order B. Second order C. Third order D. Zero order
46	Half-lives required to convert 100% reactant to product for a first order reaction are	A. 10 B. 1000 C. 100 D. Infinity